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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,390	08/01/2000	Hiroshi Mizumura	0879-0269P	5731

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EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 02/12/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,390

Applicant(s)

MIZUMURA, HIROSHI

Examiner

Gevell Selby

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yu, 5,434,621.**

In regard to claim 1, Yu, 5,434,621, discloses a lens system (see figure 1), comprising:

a lens apparatus (see figure 3, element 10) including a movable lens (see figure 3, element 11) and a motor (see figure 3, element 91), one of a position and a moving rate of the movable lens being controlled with the motor (see column 4, lines 35-38);

a controller connected with the lens apparatus (see figure 3, element 80);

and

a control part mounted in one of the lens apparatus and the controller (see figure 3, elements 20 and 90),

wherein the lens system executes a control of the movable lens based on one of a control function provided in the lens apparatus and a control function provided in the controller (see column 4, line 41-44),

wherein the control part obtains contents of a control of the movable lens based on the one of the control functions, and the control part executes the control of the movable lens based on the obtained contents of the control (see column 4, line 41-44).

In regard to claim 5, Yu, 5,434,621, discloses the lens system as defined in claim 1, wherein when the controls to be executed in the control part are overlapped at the same time, the control part selects one of the controls to execute in accordance with a predetermined selection process (see figure 2, step S2 and column 5, lines 2-9).

When the automatic zoom key control is input, the zoom position signal is also output by the decoder at the same time. The microcomputer first reads in the key control and switch to automatic zoom mode and then reads in the positional signal and processes it.

In regard to claims 2 and 6, Yu, 5,434,621, discloses the lens system as defined in claims 1 and 5, wherein:

the control of the movable lens includes a control of a zoom lens (see figure 3, element 11 and column 4, line 2);

the control function provided in the lens apparatus includes a view angle correction function (see column 6, lines 48-62); and

the control function provided in the controller includes at least one of a shot function and a limit function (column 4, lines 14-17 and column 6, line 48 to column 7, line 4).

In regard to claims 3 and 7, Yu, 5,434,621, discloses the lens system as defined in claims 2 and 6, wherein when the zoom lens moves to and stops at a shot position by the control based on the shot function, the control part validates the control based on the view angle correction function (see figure 2 and column 4 lines 62-66).

In regard to claims 4 and 8, Yu, 5,434,621, discloses the lens system as defined in claims 2 and 6, wherein the control part executes the control based on the limit function prior to the view angle correction function in a case where the zoom lens moves to an outside of a limit position based on the limit function by executing the control based on the view angle correction function (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4).

When the object being captured moves or the photographer moves, the camera detects the zooms lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.

In regard to claim 9, Yu, 5,434,621, discloses a lens apparatus, comprising:

- a focus lens (see figure 3, element 12);

- a zoom lens (see figure 3, element 11);

- a controller (see figure 3, element 80); and

- a control part (see figure 3, elements 20 and 90) which executes a control for moving the zoom lens based on a control signal provided from the controller (see column 4, lines 40-44) and executes a control based on a view angle correction function for moving the zoom lens to a position to prevent changing of

a view angle due to moving of the focus lens (see column 6, line 48 to column 7, line 4),

wherein the controller obtains, from the control part, a position signal representing a position of the zoom lens (see figure 3, elements 20 and column 4, lines 8-10),

wherein the control part obtains, from the controller, a control signal for moving the zoom lens to a target position set by the controller according to the position signal (see column 4, lines 40-44 and column 5, lines 20-25),

wherein the control part comprises a position signal fixing device (see figure 3, element 80) which fixes, when executing the control based on the view angle correction function, a value of the position signal outputted from the control part to the controller (see column 5, lines 2-9) to a value representing a position of the zoom lens before executing the control based on the view angle correction function (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63-column 7, line 4).

When the object being captured moves or the photographer moves, the camera detects the zoom lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.

In regard to claim 10, Yu, 5,434,621, discloses the lens apparatus as defined in claim 9, wherein the position of the zoom lens before executing the control based on the view angle correction function is a position where the zoom lens is stopped by the control

based on the control signal provided from the controller (see column 4, lines 40-44 and column 5, lines 20-25).

In regard to claim 11, Yu, 5,434,621, discloses a lens apparatus, comprising:

- a focus lens (see figure 3, element 12);

- a zoom lens (see figure 3, element 11);

- a controller (see figure 3, element 80); and

- a control part (see figure 3, elements 20 and 90) which executes a control for moving the zoom lens based on a control signal provided from the controller (see column 4, lines 40-44) and executes a control based on a view angle correction function for moving the zoom lens to a position to prevent changing of a view angle due to moving of the focus lens (see column 6, line 48 to column 7, line 4),

wherein the controller has a limit function for obtaining, from the control part, a position signal representing a position of the zoom lens (see figure 3, elements 20 and column 4, lines 8-10) and for restricting a moving range of the zoom lens so that the zoom lens does not move to an outside of a predetermined limit position based on the position signal (see column 5, lines 20-25), wherein the control part comprises:

- a limit position determining device (see figure 3, element 80) which determines the limit position by changing a value of the position signal being outputted from the control part to the controller from a value representing an actual position of the zoom lens (see column 6, lines 58-62) and detecting a

change of the control signal outputted from the controller with respect to the changed value of the position signal (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4);

[When the object being captured moves or the photographer moves, the camera detects the zooms lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.]; and

a restricting device (see figure 3, element 80) which restricts a moving range of the zoom lens so that the zoom lens does not move to an outside of the limit position determined by the limit position determining device (see column 6, line 65 to column 7, line 4).

In regard to claim 12, Yu, 5,434,621, discloses a lens apparatus, comprising:

a focus lens (see figure 3, element 11);

a zoom lens (see figure 3, element 12);

a controller (see figure 3, element 80); and

a control part (see figure 3, elements 20 and 90) which executes a control for moving the zoom lens based on a control signal provided from the controller (see column 4, lines 40-44) and executes a control based on a view angle correction function for moving the zoom lens to a position to prevent changing of a view angle due to moving of the focus lens (see column 6, line 48 to column 7, line 4),

wherein the controller has a limit function for obtaining, from the control part, a position signal representing a position of the zoom lens (see figure 3,

elements 20 and column 4, lines 8-10) and for restricting a moving range of the zoom lens so that the zoom lens does not move to an outside of a predetermined limit position based on the position signal (see column 5, lines 20-25), wherein the control part comprises:

a position signal fixing device (see figure 3, element 80) which fixes, when executing the control based on the view angle correction function by the control part, a value of the position signal outputted from the control part (see column 5, lines 2-9) to the controller to a value representing a position of the zoom lens before executing the control based on the view angle correction function (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4);

[When the object being captured moves or the photographer moves, the camera detects the zooms lens is out of position or outside of the limit and corrects the viewing angle by moving the zoom lens.];

a limit position determining device (see figure 3, element 80) which determines the limit position by changing a value of the position signal being outputted from the control part to the controller from a value representing an actual position of the zoom lens (see column 6, lines 58-62) and detecting a change of the control signal outputted from the controller with respect to the changed value of the position signal (see figure 2, step S5, column 5, lines 45-58, and column 6, line 63- column 7, line 4); and

a restricting device (see figure 3, element 80) which restricts a moving range of the zoom lens so that the zoom lens does not move to an outside of the limit position determined by the limit position determining device (see figure 4 and column 6, line 63- column 7, line 4).

In regard to claim 13, Yu, 5,434,621, discloses the lens apparatus as defined in claim 12, wherein when the control signal provided from the controller changes by at least a predetermined value in a case where the position signal fixing device fixes the position signal, the control part executes a control for moving the zoom lens based on the control signal and the position signal fixing device returns the position signal to a value indicating an actual position of the zoom lens (see column 6, line 58 to column 7, line 4).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art discloses automatic zoom lens systems with shot and limit functions:

Hamamur et al., US 5,815,748,

Sato et al., US 5,771,410,

Imafuji et al., US 5,634,142.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, Vu Le can be reached on 703-308-6613. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

gvs

A handwritten signature in black ink, appearing to read 'Andrew Christensen', with a long horizontal flourish extending to the right.

ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600